What is claimed is:

1. An electric power steering system for providing steering assist by applying a power of an electric motor to a steering mechanism via a reduction mechanism, the steering mechanism extending from a steering member to dirigible wheels,

wherein a viscous material is provided on a transmission path of the motor power, which extends from the electric motor to the steering mechanism via the reduction mechanism, the viscous material having a viscosity constant C satisfying the following inequality (1):

$$0.8J\omega p \leqq C \quad \ldots (1)$$

where J denotes the inertia of the electric motor, and ωp denotes the resonant angular frequency of the steering mechanism including the electric motor and the reduction mechanism.

2. An electric power steering system according to Claim 1, wherein the viscous material has its viscosity constant C defined to satisfy the following inequality (2):

$$0.8J\omega p \leqq C \leqq 4J\omega p \quad \ldots (2).$$

3. An electric power steering system according to Claim 1 or 2, wherein the viscous material is grease applied to a meshing engagement portion between teeth

portions included in the reduction mechanism.